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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,525	12/11/2003	Demetrius Sarigiannis	2269-5924US (03-0308.00/U)	9718
24247	7590	10/17/2006	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			SCHILLINGER, LAURA M	
			ART UNIT	PAPER NUMBER
			2813	

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/734,525

Applicant(s)

SARIGIANNIS ET AL.

Examiner

Laura M. Schillinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8-13 and 38 is/are pending in the application.
- 4a) Of the above claim(s) 38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Newly submitted claim 38 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: it requires a nonmetal halogenated material which is a separate and distinct species from that of claim 1.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 38 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8-13 are rejected under 35 U.S.C. 103(a) as being obvious over Derderian ('813) in further view of Malpass et al ('571).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only

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under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

The following claimed limitations are anticipated by Derderian as cited below:

1. A method of removing halogenated materials from a halogen-containing environment, comprising: introducing at least one gaseous aluminum compound into a halogen-containing environment; reacting the at least one gaseous aluminum compound with at least one halogenated material to form a gaseous reaction product; and removing at least a portion of the gaseous reaction product from the environment (Col.2, lines: 35-50).

However Derderian teaches to use TEA as the gaseous aluminum compound and fails to teach wherein the compound is selected from the group consisting of alane, an

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alkylaluminum hydride, an alkylaluminum halide, an alkylaluminum sesquihalide and an aluminum sesquihalide as recited by Applicant's amended claim language.

However it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the TEA taught by Derderian with a different compound selected from the group consisting of alane, an alkylaluminum hydride, an alkylaluminum halide, an alkylaluminum sesquihalide and an aluminum sesquihalide. Because as Malpass teaches TEA can be substituted for alkylaluminum halides (Col.2, lines: 25-40). Consequently, such claim language is considered to be an obvious variation of compound materials.

2. The method of claim 1, wherein introducing at least one gaseous aluminum compound into the halogen-containing environment comprises introducing the at least one gaseous aluminum compound into an environment having at least one halogenated material adhered to at least one surface associated therewith (Col.2, lines: 35-50).

3. The method of claim 1, wherein introducing at least one gaseous aluminum compound into the halogen-containing environment comprises introducing the at least one gaseous aluminum compound into an environment having the at least one halogenated material contained therewithin (Col.2, lines: 35-50).

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4. The method of claim 1, wherein introducing at least one gaseous aluminum compound into the halogen-containing environment comprises pulsing the at least one gaseous aluminum compound into the halogen-containing environment (Col.6, lines: 20-25).

5. The method of claim 1, wherein introducing at least one gaseous aluminum compound into the halogen-containing environment comprises introducing the at least one gaseous aluminum compound into the halogen-containing environment in an amount sufficient to react with the at least one halogenated material (Col.2, lines: 35-50).

8. The method of claim 1, wherein introducing at least one gaseous aluminum compound into the halogen-containing environment comprises introducing TMA into the halogen-containing environment (Col.2, lines: 35-50 and Col.8, lines: 1-15 and lines: 25-33).).

9. The method of claim 1, wherein introducing at least one gaseous aluminum compound into the halogen-containing environment comprises introducing at least one organic aluminum compound selected from the group consisting of dimethyl aluminum hydride, diethyl aluminum hydride; and methyl ethyl aluminum hydride into the halogen-containing environment (Col.2, lines: 35-50 and Col.8, lines: 1-15 and lines: 25-33)..

10. The method of claim 1, wherein introducing at least one gaseous aluminum compound into the halogen-containing environment comprises introducing the at least

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one gaseous aluminum compound into a deposition chamber contaminated with the at least one halogenated material (Col.2, lines: 35-50).

11. The method of claim 1, wherein reacting the at least one gaseous aluminum compound with at least one halogenated material to form a gaseous reaction product comprises reacting the at least one gaseous aluminum compound with the at least one halogenated material to form an aluminum halide compound (Col.2, lines: 50-60).

12. The method of claim 1, wherein reacting the at least one gaseous aluminum compound with at least one halogenated material comprises reacting the at least one gaseous aluminum compound with at least one of Cl (Col.2, lines: 45-60).

13. The method of claim 1, wherein removing at least a portion of the gaseous reaction product from the environment comprises venting the environment or applying a vacuum to the environment (Col.5, lines: 1-10).

Response to Arguments

Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

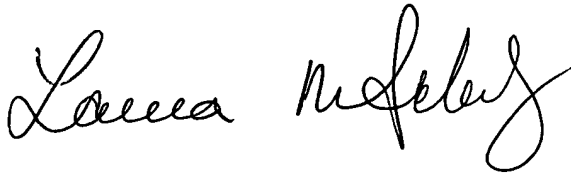
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Laura M Schillinger". The signature is fluid and cursive, with the first name "Laura" written in a larger, more prominent script than the last name "Schillinger".

Laura M Schillinger
Primary Examiner
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10/11/06